

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte WILLIAM T. CARPENTER

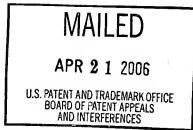
Appeal No. 2006-0089  
Application No. 09/773,815

ON BRIEF

Before FRANKFORT, BAHR and NAPPI, Administrative Patent Judges.  
FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 11 through 20, all of the claims remaining in the application. Claims 1 through 10 have been canceled.



Appellant's invention relates to a method for modifying the axis of rotation of a planet by the redistribution of mass in or on the planet's crust. Claim 11, the only independent claim remaining, is representative of the subject matter on appeal and reads as follows:

11. A method of modifying the axis of rotation of a planet comprising the steps of:

measuring the mass of a planet;

determining the center of mass of the planet;

characterizing the axis of rotation of the planet;

selecting a desired character of rotation;

calculating a moment of stability required to cause the desired character of rotation;

determining a position and a mass of a compensating substance sufficient to effect the moment of stability; and

positioning the mass in the position.

The references of record relied upon by the examiner in rejecting the appealed claims are<sup>1</sup>:

White, "Pole Shift: Predictions and Prophecies of the Ultimate Disaster", Doubleday & Company, Inc. (1980).

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<sup>1</sup> The examiner mistakenly indicates on page 3 of the answer that "[n]o evidence is relied upon by the examiner in the rejection of the claims under appeal."

Chao, "Anthropogenic impact on global geodynamics due to reservoir water impoundment", Geophysical Research Letters, vol. 22, no. 24, pgs. 3529-3532 (December 15, 1995).

Brown, "Cataclysms of the Earth", Twayne Publishers Inc., pages 151-156 (1996).

Claims 11 through 20 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In the examiner's view, the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 11 through 20 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chao in view of White and Brown.

Rather than reiterate the examiner's full statement of the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellant regarding those rejections, we make reference to the examiner's answer (mailed July 5, 2005) for the examiner's reasoning in support of the rejections, and to

appellant's brief (filed April 11, 2005) and reply brief (filed September 6, 2005) for the arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we have made the determinations which follow.

We turn first to the examiner's rejection of claims 11 through 20 under 35 U.S.C. § 112, first paragraph, as being based on a non-enabling disclosure. It is by now well-established law that the test for compliance with the enablement requirement in the first paragraph of 35 U.S.C. § 112 is whether the disclosure, as filed, is sufficiently complete to enable one of ordinary skill in the art to make and use the claimed invention without undue experimentation. Note, In re Moore, 439 F.2d 1232; 169 USPQ 236 (CCPA 1971). See also In re Scarborough, 500 F.2d 560, 182 USPQ 298 (CCPA 1974) and In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Moreover, in rejecting a

claim for lack of enablement, it is also well settled that the examiner has the initial burden of advancing acceptable reasoning inconsistent with enablement in order to substantiate the rejection. See In re Strahilevitz, 668 F.2d 1229, 212 USPQ 561 (CCPA 1982); In re Marzocchi, 439 F.2d 220, 169 USPQ 367 (CCPA 1971). Once this is done, the burden shifts to appellant to rebut this conclusion by presenting evidence to prove that the disclosure in the specification is enabling. See In re Doyle, 482 F.2d 1385, 179 USPQ 227 (CCPA 1973); In re Eynde, 480 F.2d 1364, 178 USPQ 640 (CCPA 1973).

In the case before us, after reviewing the disclosure as set forth in the specification, we are of the opinion that the examiner has not met his burden of advancing acceptable reasoning inconsistent with enablement. The examiner's position is set forth on pages 3 and 4 of the answer and essentially questions the ability of one skilled in the art to calculate "a moment of stability required to cause the desired character of rotation" given that the specification fails to disclose any equations or methods to perform such a calculating step. The examiner also poses the question of how a mass sufficient to achieve the desired change in the axis of rotation of a planet would be

captured and positioned to effect the desired moment of stability, and asks how long such a process would take.

Like appellant, given the state of the art as exemplified by Chao, White and Brown, and the disclosure of the present application, we have no doubt that one skilled in the pertinent art would be able to calculate a moment of stability required to cause a desired character of rotation and otherwise perform the claimed method without resort to undue experimentation. Note, pages 3-5 of the brief and pages 3 and 4 of the reply brief for appellant's arguments and comments.

Looking to the article by Chao, even though it does not specifically address a method like that claimed by appellant, it is clear that the level of skill in the art of global geodynamics is very high and that one skilled in the art would be able to calculate the relevant quantities required in independent claim 11 on appeal, including calculating a moment of stability required to cause a desired character of rotation. As for the examiner's concerns regarding capturing a mass of sufficient size, the time needed to do so, and the exact manner of positioning that mass in its predetermined location, both

appellant's specification and Chao provide reasonable answers to those questions, especially given the broad scope of the claims.

With particular regard to the scope of the claims, we note appellant's indication at page 4, lines 25-26 of the specification that "[t]he amount of mass altered would be dependent upon the desired change to the Earth's center of mass and consequent changes to the axis of rotation." Thus, even a relatively minor change or modification in the axis of rotation would fall within the bounds of the claims on appeal. We also note appellant's disclosure at page 5, wherein it is indicated that

In the best embodiment of the invention, water from the worlds oceans is contained in cavities or reservoirs either above ground or underground or both. Since the rotating Earth has a gravitational field that overpowers the centrifugal forces, at the crust's radius, that are caused by the rotation of our planet, it is unique from the sphere rotating on Earth. This gravitational field can hold a fluid mass in place on the surface of the Earth. This fluid mass, so held in place, tends to distribute and redistribute itself relatively equally over the surface of the oceans in which it is laterally contained, in conformity with the combined effects of the extraneous gravitational variations caused by the Sun, Moon, and other planets. Therefore this fluid mass of the oceans is the most ideal material to use for the redistribution mass because a portion of this fluid mass can be placed at some predetermined location, which would cause an actual redistribution of mass of the entire planet,

because the remainder of this fluid mass of the oceans would then equally redistribute itself throughout the above referenced surface.

Capturing and removing of any portion of the fluid mass of the oceans would cause the remaining mass to be proportionately diminished. However, this diminishment would be equally diminished over the entire surface of the interconnected oceans of the planet and only the fluid, or sea, level would be effected. Therefore actual redistribution of mass of a planet can occur by moving a portion of this fluid mass from the area where it can redistribute itself and containing this removed portion in a manner where it cannot redistribute itself. Selectively containing any portion of this removed fluid mass in a predetermined, or any, location would thereby change the center of mass of the Earth and, since it is rotating in inertial space, thereby cause the axis of rotation to be altered. Such change in the axis of rotation changes the relationship to the Sun, Moon and other planets and would effect the Earth's climatic pattern due to the change in angle of incidence to the Sun.

In the final analysis, we agree with appellant that it appears the examiner has confused the question of enablement with the issue of the difficulty (economically and timewise) of carrying out the disclosed and claimed method. The examiner has made no attempt to explain exactly why one of ordinary skill in the art would have been unable to calculate the relevant quantities and subsequently carry out the steps of the recited method via known engineering techniques.



Thus, for the above reasons, we will not sustain the examiner's rejection of claims 11 through 20 under 35 U.S.C. 112, first paragraph, as being directed to a non-enabling disclosure.

We next consider the examiner's rejection of claims 11 through 20 under 35 U.S.C. § 103(a) as being unpatentable over Chao in view of White and Brown. Chao looks at human's impact on global geodynamics due to reservoir water impoundment since 1950, noting that such mass redistribution due to artificial reservoirs impacts global geodynamics by changing the Earth's moment of inertia and hence the rotation of the Earth under the conservation of angular momentum, thereby contributing a fraction to the phenomenon of "polar drift." Brown and White both discuss the problem of the continual growth of the South Polar icecap creating a distortion, or wobble, in the Earth's normal spin, and hypothesize that every six to eight thousand years such growth can cause a sudden and radical shift in the Earth's axis of rotation, thereby causing continents and sea areas to be cataclysmically rearranged creating what the authors characterize as the "ultimate disaster." Although these references all recognize that the Earth's axis of rotation is slowly changing and that such changes induced by both humans and nature will

alter the Earth's living environment, none of them contemplates, teaches or suggests the particular method of claims 11 through 20 on appeal as a solution to the Earth's changing rotational orientation.

Nor do the applied references collectively teach or suggest appellant's claimed pro-active method involving the steps of measuring the mass of the planet, determining the center of mass of the planet, characterizing the axis of rotation of the planet, selecting a desired character of rotation, calculating a moment of stability required to cause the desired character of rotation, determining a position and a mass of a compensating substance sufficient to effect the moment of stability, and positioning the mass in the position. For that reason, we will not sustain the examiner's rejection of claims 11 through 20 under 35 U.S.C. § 103(a).



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